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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,250	07/09/2001	Joseph P. Tunney	47440-042000	8638
7590	11/10/2004			
			EXAMINER	
			CHAUDHRY, SAEED T	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/901,250	TUNNEY ET AL.
	Examiner Saeed T Chaudhry	Art Unit 1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 25 October 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,3-5,7-21 and 24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,3-5,7-21 and 24 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 25, 2004 has been entered.

### Double Patenting

Claims 1, 3-5, 7-21 and 24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 9, 10, 16, 17, 18 of U.S. Patent No. 6,443,166 in view of Brown.

US Patent No. 6,443,166 discloses to clean containers with nitrogen gas and venting the nitrogen gas/chemical mixture to a flare but fails to clean containers having sulfur dioxide gas or chlorine gas and neutralize with neutralizing material such as sodium hydroxide.

Brown (5,017,240) discloses a method for the removal and recovery of hydrocarbon from bulk oil or gasoline storage tanks. The air/vapor discharged from the tank is treated by the treatment facility 16 of the invention which is illustrated to the right of the tank 10 in FIG. 1. The treatment facility 16 comprises a blower 14, several condenser vessels 18, 20 and 22, a caustic wash vessel 24 and a solid absorbent treatment vessel 26 (see col. 3, lines 20-25).

The bulk storage tank is evacuated with a conventional blower 14 having a capacity from 1000 to about 5000 cubic feet per minute and the air/vapor mixture is discharged into the first stage 34 of the treatment facility. This stage employs a caustic wash treatment in vessel 24

in which the air/vapor mixture is passed counter-current to a spray of caustic, typically aqueous solutions of about 30 weight percent sodium hydroxide to remove sulfur compound from the air/vapor mixture such as mercaptans, hydrogen sulphate, sulfur dioxide and the like. The caustic solution is effective in removing the sulfur compounds which remain dissolved in the liquid and accumulate in the caustic wash tank 36 (see col. 3, lines 39-52). The nitrogen can be introduced to the bulk petroleum storage tank 10 as a source of the flush gas therein by discharging it into the air recycle line 76 (see col. 4, lines 36-41). The dehumidified mixture is passed to the second condensation stage within vessel 20, through line 48. In vessel 20, the air/vapor and nitrogen mixture is mixed with cold nitrogen gas supplied through line 69 which, as described above, is sufficient to cool the mixture to a temperature of about -40.degree. F (see col. 5, lines 3-8). Usually from two to about ten volumes of fresh air per volume of air/vapor mixture within the tank must be introduced as flushing air into the tank before the level of hydrocarbons in the vapor space of the tank is at a sufficiently safe level for workmen (see col. 3, lines 10-15).

It would have been obvious at the time applicant invented the claimed process to utilize the process of Brown into the process of (6,443,166) patent to neutralize spent gas with sodium hydroxide rather than sending the gas/chemical mixture to a flare to reduce the cost of the process of incineration and to use cheap sodium hydroxide for neutralization. Further one would use neutralizing process over incineration since by incinerating gas/chemical mixture still pollute the environment. Further, vacuuming the tank for introducing the gas into the tank are equivalent to blowing the gas into the tank and removing the mixed gas. Therefore, one of ordinary skill in the art would utilize any of the process for flowing the gas into the tank and out of the tank.

The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and © may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

### **Allowable Subject Matter**

Claims 1, 3-21 and 24 would be allowed, if a proper terminal disclaimer is provided.

### **Reasons For Allowable Subject Matter**

**The following is an Examiner's statement of reasons for the indication of allowable subject matter:**

None of the prior art discloses or suggests method of cleaning a rail tank cars having chlorine gas or sulfur dioxide gas by injecting heated gas and removing gas/chemical mixture from the rail tank car and injecting into a neutralizing tank and then releasing the input gas from the tank.

The closest cited prior art Brown discloses to inject fresh air and fail to disclose that the fresh air is heated before injecting into the tank. Bombard also fails to suggest a step of releasing the gas from the tank.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.*

*When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.*

*Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.*

*Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).*

*Saeed T. Chaudhry  
Patent Examiner*



MICHAEL BARR  
SUPERVISORY PATENT EXAMINER